2009

Review of *The Natural and the Supernatural in the Middle Ages*, by Robert Bartlett

Elly Truitt
Bryn Mawr College, etruitt@brynmawr.edu

new government agency, the Bureau of Measurement, was created to carry out the mission. Unfortunately, the task of establishing a unified system of measurement was interrupted by the Japanese invasion in the 1930s and the civil war in the 1940s.

The last six chapters discuss the development of metrology from 1949 to the present. The government of the People's Republic also adopted the metric system as the standard and has continued to unify the units of measurement in the country. But political turmoil from the 1950s to the mid-1970s significantly hindered the development of metrology in China. Only after the Cultural Revolution ended in 1977 could proper attention again be paid to metrology. A significant breakthrough occurred in 1985, when the Act of Measurement was passed. This legislation grants the metric system legal status, specifies the administration of measurement instruments, instructs central and local governments to establish enforcement agencies, and details punishments for violations.

This book tells the story of how the activities associated with measurement were administered in China by three governments with quite different political, social, and ideological characteristics. This is an interesting topic that should draw the attention not only of historians of metrology but of historians of science in general. In many cases the book falls short in its discussions of the relationships between measurement and the political environment, and it does not offer enough details on how social, political, and ideological factors affected governmental policies with regard to measurement. Nevertheless, this book represents the first attempt to discuss the legal aspect of metrology in this particular era. It has made an important contribution to history of metrology.

XIANG CHEN

■ Middle Ages and Renaissance

Robert Bartlett. *The Natural and the Supernatural in the Middle Ages.* x + 200 pp., illus., bibl., index. Cambridge/New York: Cambridge University Press, 2008. $85 (cloth).

Robert Bartlett's most recent offering is a collection of the Wiles Lectures he gave at the Queen's University of Belfast in 2006. *The Natural and the Supernatural in the Middle Ages*, comprising four linked essays based on the lectures, gives as a whole an account of the medieval limits of the "natural" and the invention of the supernatural as a category to explain the causation of certain phenomena. The essays helpfully proceed from the general to the specific, beginning with an examination of the definitions of "nature" or "natural" and "supernatural" and ending with a case study of Roger Bacon.

Bartlett's stated interest is not in delineating the stark boundaries between the "natural/supernatural" binary. Instead, he is more interested in the failures of those boundaries and in what pressures the debates, anxieties, and conflicts of those failures place on the categories of "natural" and "supernatural." Recognizing that belief systems are never coherent or stable, Bartlett examines moments of "intellectual discomfort," of conflicts between opposing arguments and between experience and authority, and what they reveal about anomalies in different paradigms in the Middle Ages (p. 2). The volume opens with an examination of the limits of the category of "natural" in the medieval period, especially after Peter Lombard, in his mid-twelfth-century biblical commentary the *Sentences*, drew on Aristotelian logic to posit that there are things beyond nature. Later Scholastic writers, especially Thomas Aquinas, took up Lombard's formulation and went beyond it, positing that miracles had a cause beyond nature, thereby stressing a sharper division between the natural and the miraculous than they had inherited from patristic authors. Aquinas in particular was, as Bartlett shows, central to articulating "the supernatural" as a category—as a series of phenomena (miracles) and as a cause (God). From here Bartlett moves to an examination of ideas of the medieval universe from the eleventh to the fourteenth centuries. Beginning with the ongoing debate about the distribution of the elements and its impact on terrestrial geography, the argument moves outward to celestial motion and varying explanations of the causes of eclipses. In two succinct sets of case studies, Bartlett demonstrates that medieval ideas about the physical nature of the world were ongoing and hotly contested.

Having examined the abstract ideas of nature and the supernatural, and moved to a more bounded discussion of the universe and the physical world, Bartlett next turns his attention to the varieties of creatures that existed—angels, humans, and animals. Included with the angels is a consideration of demons, and Bartlett presents a useful overview of medieval demonology and the problems that demons raised about the strength of physical laws. Further concern about boundaries (in this case, the distinction between human and animal, rather than angelic and human) appears in consideration of the nature of the monstrous races—the dog-headed,

the one-footed, the giant beings that were thought to exist at the margins of the inhabitable world. As the individual experiences of missionaries, merchants, and diplomats contradicted prior authorities on the existence of monstrous races, new theories to explain racial and geographic diversity appeared. By concentrating on seemingly fantastical nonhuman and inhuman beings, Bartlett illustrates the extremes of belief in creation and existence. The volume closes with an essay on Roger Bacon and his attempts to produce an account of the universe that relied on both large abstractions (physical principles) and experiential explanation.

In tone and scope, this volume has much in common with another collection of essays on the medieval universe—C. S. Lewis's *The Discarded Image* (Cambridge, 1964). But where Lewis set out to draw conclusions about an underlying medieval model of the universe, Bartlett is more interested in exploring ambiguity and conflict. The essays touch on topics of recent historiographic interest in the history of science, namely wonder, marvels, and *mirabilia.* Given that, it is surprising that the author does not rely more on the fairly recent scholarship of Mary Baine Campbell (*Wonder and Science* [Cornell, 1999]) and Lorraine Daston and Katharine Park (*Wonders and the Order of Nature* [Zone, 1998]). Furthermore, some readers may be frustrated by the broad strokes used to make the central argument. However, the comprehensive notes and bibliography allow those scholars to explore further on their own. The overall perspective and a few infelicities of style reflect this book's origin as a lecture series. Yet this volume offers a clear overview of many of the major points of intellectual discomfort surrounding discussions of "nature" and "natural" in the high Middle Ages. By examining and displaying these fault lines so engagingly, Bartlett shows up fruitful avenues of further inquiry while making plain that medieval beliefs in the natural and the supernatural were dynamic and divisive.

E. R. Truitt

Giordano Bruno. *De la causa, principio e uno / Über die Ursache, das Prinzip und das Eine.* Translated, with an introduction and commentary, by **Thomas Leinkauf.** (Giordano Bruno Werke, 3.) cxcii + 537 pp., bibl., indexes. Hamburg: Felix Meiner Verlag, 2007. €148 (cloth).

Felix Meiner Verlag, based in Hamburg, has begun the publication of a new edition of the works of Giordano Bruno, a prestigious project supported by the Fritz Thyssen Foundation. Thomas Leinkauf is the general editor for this important undertaking, which has been accomplished with the cooperation of the Istituto Italiano per gli Studi Filosofici in Naples (including the Centro Internazionale di Studi Bruniani) and the French publishing house Les Belles Lettres, which provided the most recent version of Bruno's Italian writings, worked out by the well-known expert Giovanni Aquilecchia. This new edition of Bruno's works is a bilingual one, with the original Italian text on the left side and the German translation on the right. Each volume begins with an important introduction that details the circumstances and the context surrounding the composition of the book.

Volume 3, the first of the collection to appear, presents Bruno's *De la causa, principio e uno* (1584), translated by Leinkauf. This book, as its title suggests, develops Bruno's own metaphysics and cosmology, which turns toward an immanentist monism. In addition to Bruno's original text and the German translation, the volume includes a long and useful introduction by Leinkauf that takes the latest discoveries and works on Bruno's thought into account and establishes the place and function of *De la causa* in his work. Contrary to Aquilecchia—who adheres strictly to Bruno's assertions in his Italian writings that *De la causa* serves as essentially a mediation and a transition between *La cena* and *De l'infinito*—Leinkauf sides with Michele Ciliberto in holding that this metaphysical writing is the kernel of all Bruno's work (from his very first mnemonic or Lullian writings during the Parisian period up to his last Latin writings), including his responses to the Holy Office. So the metaphysical dialogue of *De la causa* is the very foundation for all Bruno's work; thus it is not by chance that this text has been chosen as a starting point for this new edition. Bruno's metaphysics of the One does not absorb the infinite diversity of beings under its identity, and the irreducible plurality of individuals does not divide up the One. On the contrary, an essential tension between identity and infinite diversity is characteristic of Bruno's metaphysics, despite all his borrowings from Plato, Aristotle, Plotinus, Proclos, Nicholas of Cusa, and Ficino.

Leinkauf has not only devoted an important part of his substantial introduction to Bruno's *De la causa* (pp. lxix–cxii); he also provides an interesting *Wirkungsgeschichte*—that is, a historical study of the effects produced by this work in classical and modern European philosophy (pp. xciv–cliii). An international, substantial, and up-to-date bibliography of 37 pages crowns this panoramic introduction. Moreover, 248 pages of copious notes will provide careful